ABSTRACT

One inventive aspect pertains to a watermarking mechanism that allows a watermark to be determined from only a part of the video sequence without human intervention and without reference to the original watermarked frames. This watermark has improved

5   invisibility, detection reliability and robustness. Invisibility is improved through the inclusion of frame difference parameters to calculate the amplitude of the watermark. Detection reliability and robustness can be improved by assuring that opposite signed values for the pseudo-random number sequence are spatially near each other and using data blocks forming the data sets, respectively. Another inventive aspect pertains to a watermarking

10   mechanism that is exclusively dependent on the data contained in the data sets and is completely interoperable between spatial and compressed domains.